

CLAIMS

What is claimed is:

1. A portable computer including a main body and a monitor, in which a planar inverted F antenna (PIFA) is installed, the planar inverted F antenna comprising:
a ground plane;
a first radiator connected to the ground plane, spaced from the ground plane; and
a second radiator connected to the first radiator, spaced from the first radiator, and
having an end connected to an antenna cable.
2. The portable computer according to claim 1, wherein:
the planar inverted F antenna is installed in an upper part of the monitor.
3. The portable computer according to claim 2, further comprising:
a screw engaging the planar inverted F antenna with the upper part of the monitor.
4. The portable computer according to claim 2, wherein:
the ground plane of the planar inverted F antenna is electrically grounded on a metal
part of the upper part of the monitor.
5. The portable computer according to claim 4, wherein the monitor comprises:
an opening/closing part with a casing,
wherein the first radiator and the second radiator are respectively provided in the casing
of the opening/closing part of the monitor.
6. The portable computer according to claim 1, wherein:
frequency bands of the first radiator and the second radiator are changed according to
adjustment of at least one of a length of the first radiator, a length of the second radiator, and a
gap between the first radiator and the second radiator.
7. The portable computer according to claim 1, wherein:
the second radiator is disposed in parallel with a side of the first radiator.
8. A planar inverted F antenna comprising:

- a ground plane;
- a first radiator connected to the ground plane, with a predetermined separation from the ground plane;
- a second radiator connected at a first end thereof to the first radiator; and
- an antenna cable connected to a second end of the second radiator.

9. The antenna according to claim 8, wherein:
the antenna operates in more than two frequency bands.

10. The antenna according to claim 8, wherein:
the first and second radiators are substantially parallel.

11. The antenna according to claim 8, wherein:
the first radiator and the ground plane are substantially parallel.

12. The antenna according to claim 8, wherein:
the ground plane, the first radiator, and the second radiator are integrally formed.

13. The antenna according to claim 8, wherein:
the frequency bands of the antenna are adjusted by adjusting at least one of a length of the first radiator, a length of the second radiator, and a gap between the first and second radiators.

14. The antenna according to claim 8, further comprising:
an engaging part, with which to mount the antenna.

15. A portable computer comprising:
a main body;
a monitor; and
a planar inverted F antenna installed in the monitor, the antenna having
 a ground plane,
 a first radiator connected to the ground plane, with a predetermined separation
from the ground plane,
 a second radiator connected at a first end thereof to the first radiator, and

an antenna cable connected to a second end of the second radiator.

16. The portable computer according to claim 15, wherein:
the antenna operates in more than two frequency bands.
17. The portable computer according to claim 15, wherein:
the first and second radiators are substantially parallel.
18. The portable computer according to claim 15, wherein:
the first radiator and the ground plane are substantially parallel.
19. The portable computer according to claim 15, wherein:
the ground plane, the first radiator, and the second radiator are integrally formed.
20. The portable computer according to claim 15, wherein:
the frequency bands of the antenna are adjusted by adjusting at least one of a length of
the first radiator, a length of the second radiator, and a gap between the first and second
radiators.
21. The portable computer according to claim 15, wherein the antenna comprises an
engaging part to mount the antenna to the monitor.
22. The portable computer according to claim 22, wherein:
the engaging part has an opening, through which a fastener passes to mount the
antenna to the monitor.
23. The portable computer according to claim 15, wherein:
the monitor comprises a metal part; and
the ground plane is electrically grounded by contacting the metal part.
24. The portable computer according to claim 15, further comprising:
a latch part to open and close the monitor with respect to the main body,
wherein the antenna is installed in the latch part.